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| EXAMINER | |
|---|---|
| GILLESPIE, BENJAMIN | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/540,154 | CARTER ET AL. | |
| | Examiner | Art Unit | |
| | BENJAMIN J. GILLESPIE | 1796 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *10 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-4,7,9-26 and 29-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7,9-26 and 29-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/9/2009 has been entered.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1-4, and 9-26** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. **Regarding claims 1 and 24:** The phrase:

> (ii) at least one polyol, comprising:
>
> (a) a polyester which is formed from:
>
> i) 60 to 100% by weight of dimer fatty acids, relative to the weight of the total weight of dicarboxylic acids; and
>
> ii) 0 to 40% by weight of non-dimer fatty acids, relative to the weight of dicarboxylic acids; ~~wherein said polyol comprises reaction residues of at least one dimer fatty acid~~ and/or
>
> (b) a dimer fatty diol.

4. Renders claims 1 and 24 indefinite because component (a) only lists dicarboxylic acid and fails to recite a hydroxyl-functional reactant. Polyester can not be produced from dicarboxylic acid alone, and component (b) is not reacted with (a).

5. **Regarding claim 7:** The language "the diol" lacks antecedent basis. It is noted that claim 1 recites "dimer fatty diol"; however, ethylene glycol and/or propylene are not fatty diol and therefore this fail to provide a basis for the limitations of claim 7.

6. **Regarding claims 20-22:** The language "an adhesive as defined in claim 1" render claims 20-22 indefinite because it is not clear if "an adhesive" is the same as the same adhesive of claim 1; the claim should recite: "*the* adhesive as defined in…".

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b), 102(e), and 103(a) that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Anticipation Rejection I**

8. **Claims 1-3, 7, 12, and 23-26** are rejected under 35 U.S.C. 102(e) as being anticipated by Westfechtel et al (U.S. Patent 6,610,811).

9. **Regarding claim 1:** Westfechtel et al teach isocyanate-terminated prepolymer that is useful in a moisture curable adhesives, wherein the prepolymer is the reaction product of polyisocyanate with dimer diol or hydroxyl-functional polyester based on diol and dimer fatty acid (Col 2 lines 13-21; col 6 lines 19-22).

10. **Regarding claim 2:** Although not explicitly disclosed by Westfechtel et al, the position is taken that the disclosed polyisocyanate exhibit the claimed viscosities are 25°C since the polyisocyanate of example 1 are referred to as "liquid polyisocyanate" at "room temperature".

11. **Regarding claim 3:** The dimers are based on C18 compounds (Col 2 lines 27-30).

12. **Regarding claim 7:** The diol used to produce the polyester comprises ethylene glycol and/or propylene glycol (Col 3 lines 10-14).

13. **Regarding claim 12:** The prepolymer has an isocyanate content of 16.8 wt% (Col 6 lines 22).

14. **Regarding claim 23:** Example 1 – prepolymer B contains 0 wt% dimer fatty acid - which satisfies the limitation "not more than 40% by weight" i.e. 0-40 wt%.

15. **Regarding claims 24 & 26:** Example 1, the viscosity of prepolymer A is 2.27 Pa/s at 25°C.

16. **Regarding claim 25:** Additional polyisocyanate may be present with the prepolymer (Col 5 lines 9-10).

**Anticipation/Obviousness Rejection I**

17. **Claims 10, 14-19, and 29-32** are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Westfechtel et al ('881).

18. **Regarding claims 10, 14-19:** As previously discussed, Westfechtel et al teach adhesive comprise isocyanate-terminated prepolymer based on the reaction product of polyisocyanate and dimer diol and/or polyester based on dimer fatty acid, however, patentees fail to teach glass transition points or mechanical properties corresponding to claims 10, 14-19. Nevertheless, the adhesive disclosed by Westfechtel et al would inherently exhibit the same properties since it is based on identical reactants present in overlapping amounts.

19. Furthermore, when applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. In re Best, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA1977).

20. The PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same. The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

21. **Regarding claim 29:** Although the viscosity for a prepolymer based on the hydroxyl-functional polyester is not disclosed, similar to the discussion set forth in paragraphs 17-19, said prepolymer would inherently exhibit the same viscosity as claimed since it is based on an identical composition.

22. **Regarding claim 30:** Example 1 – prepolymer B contains 0 wt% dimer fatty acid – which satisfies the limitation "not more than 40% by weight" i.e. 0-40 wt%.

23. **Regarding claim 31:** Column 3 lines 27-31 teach that the polyester polyol may be produced by reacting diol with dimer fatty acid **"and/or"** trimer fatty acid, i.e. the fatty acid may be 100% dimer.

24. **Regarding claim 32:** The diol is present relative to the carboxylic acid groups in an OH:COOH ratio ranging from 1.8:1 to 2:1 (Col 3 lines 16-22).

**Anticipation Rejection II**

25. **Claims 1, 3, 4, 7, 20** are rejected under 35 U.S.C. 102(e) as being anticipated by Tetsuo et al (JP 2003-013032).

26. **Regarding claim 1:** Tetsuo et al also teach moisture curable adhesives comprising polyurethane that is the reaction product of polyisocyanate and hydroxyl-functional polyester, wherein said polyester is based on dimer and trimer of fatty acid (Abstract, paragraph 11). In particular, it is preferred that the dimer is present by at least 70 wt% and the trimer present by at most 20 wt% - Tetsuo et al explain that when excess trimer is present, the polyester may undergo unwanted gelling (Paragraph 12).

27. **Regarding claim 3:** The dimer is based on C18 fatty acids (Paragraph 12)

28. **Regarding claim 4:** Aforementioned, the trimer is present by as much as 20 wt%.

29. **Regarding claim 7:** The diol is based on ethylene or propylene glycol (Paragraph 16).

30. **Regarding claim 20:** The adhesive is applied to various substrates (Paragraph 44)

**Anticipation/Obviousness Rejection II**

31. **Claims 10, 14-19, 24, 26, 29, and 31** are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over by Tetsuo et al (JP 2003-013032).

32. **Regarding claims 10, 14-19, 24, 26, and 29:** As previously discussed, Tetsuo et al teach adhesive comprise isocyanate-terminated prepolymer based on the reaction product of polyisocyanate and dimer diol and/or dimer fatty acid, however, patentees fail to teach glass transition points or mechanical properties corresponding to claims 10, 14-19. Nevertheless, the adhesive disclosed by Tetsuo et al would inherently exhibit the same properties as claimed since it is based on identical reactants in overlapping amounts.

33. Furthermore, when applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. In re Best, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA1977).

34. The PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same. The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

**35. Regarding claim 31:** Tetsuo et al teach the dimer fatty acid is preferably used by *at least* 70 wt%, i.e. 70-**100 wt%.**

**Anticipation Rejection III**

36. **Claims 1, 3, 4, and 9** are rejected under 35 U.S.C. 102(b) as anticipated by Santaniello (U.S. Patent 3,264,236).

37. **Regarding claim 1:** Santaniello teach moisture curable, isocyanate-terminate prepolymer that is the reaction product of polyisocyanate and hydroxyl-functional polyester (Col 1 lines 10-15, 60-65). Example 1 shows the polyester is the reaction product of diol and fatty acid, wherein said fatty acid comprises 75 wt% of dimer and 25 wt% of trimer, wherein the OH:COOH ratio is 1.5:1. Regarding the "adhesive" limitation of claim 1 - Santaniello teach the prepolymer is useful as a *binding* for solid fuel propellant - this is taken to satisfy "adhesive".

38. **Regarding claim 3:** The fatty acid is based on C18 acids (Col 2 lines 1-3).

39. **Regarding claim 4:** As discussed in paragraph 35 – the acid has 25 wt% of trimer.

40. **Regarding claim 9:** The polyester has a molecular weight of 2,000 (Col 2 line 66).

**Anticipation/Obviousness Rejection III**

41. **Claims 10, 14-19, 24, and 26** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Santaniello (U.S. Patent 3,264,236).

42. As previously discussed, Santaniello teach adhesives comprising isocyanate-terminated prepolymer based fatty acid polyester, however, there is no mention of glass transition points or mechanical properties corresponding to claims 10, 14-19. Nevertheless, the adhesive disclosed by Santaniello would inherently exhibit the same properties since it is based on identical reactants and present in overlapping amounts.

43. Furthermore, when applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. In re Best, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA1977).

44. The PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same. The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

**Obviousness Rejection I**

45. **Claims 9, 11, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Westfechtel et al ('811)

46. **Regarding claim 9:** As discussed in paragraph 10, Westfechtel et al teach adhesives comprising polyurethane prepolymer that is the reaction product of polyisocyanate and dimer diol or polyester based on dimer fatty acid, wherein the diol may have a hydroxyl number from 100 to 175 – which equates to a molecular weight of about 600 to 1,000, however, patentees fail to discuss what the hydroxyl number is for the polyester. Nevertheless it would have been obvious to use polyester diol having a hydroxyl number between 100 and 175 since it is the suitable value for dimer diol and the dimer diol is disclosed as being interchangable with the polyester.

47. **Regarding claim 11:** As discussed in paragraph 9, Westfechtel et al suggest polyester having molecular weights as low as 600, and since the prepolymer is formed at a NCO:OH ratio as high as 6:1, one would reasonably expect the reaction system to produce 'perfect prepolymers' i.e. a single hydroxyl-terminated polyester capped with two diisocyanate molecules - such as diphenylmethane diisocyanate (MDI). This would result in a perfect prepolymer having a molecular weight of 1,100:

(1 mole ) 600 MW polyester + (2 mole) 250 MW MDI = 600+500 = 1,100.

48. **Regarding claim 20:** Although Westfechtel et al fail to explicitly teach the adhesive coating on a substrate, it would have been obvious to apply the adhesive to a substrate since this step is required when bonding various materials.

**Obviousness Rejection II**

49. **Claims 1-4, 7, 9-20, 23-26, and 29-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Westfechtel et al ('811) in view of Tetsuo et al (JP 2003-013032).

50. **Regarding claims 1 and 4:** As discussed in paragraph 10, Westfechtel et al teach moisture curable adhesives comprising moisture curable polyurethane that is the reaction product polyisocyanate and hydroxyl-functional polyester, wherein said polyester is based on dimer and trimers of fatty acid, however, Westfechtel et al fail to teach the ranges of dimer/trimer listed in claims 1, 23, 23, 29, and 30.

51. As previously discussed in paragraph 26, Tetsuo et al also teach moisture curable adhesives comprising polyurethane that is the reaction product of polyisocyanate and hydroxyl-functional polyester, wherein said polyester is based on dimer and trimer of fatty acid (Abstract, paragraph 11). In particular, it is preferred that the dimer is present by at least 70 wt% and the trimer present by at most 20 wt% - this amount prevents the polyester from undergoing unwanted gelling (Paragraph 12). Therefore, it would have been obvious to arrive at the ranges of claims 1, 23, 24, 29, and 30 since it would produce a polyester having a viscosity desirable for liquid, moisture curable polyurethane adhesive.

52. **Regarding claim 2:** While Westfechtel et al teach the polyisocyanate is "liquid polyisocyanate" there is no discussion of the specific range in claim 2. Nevertheless, in view of Tetsuo et al, it would have been obvious to arrive at said rand since Tetsuo et al teach that the adhesive may also comprise a solvent depending how it is applied to a substrate (Paragraph 27). Therefore, it would

have been obvious to arrive at the claimed polyisocyanate viscosity since it is controlled by the amount of said solvent is added and applicants' currently claimed adhesive does not preclude the presence of solvent.

53. **Regarding claim 3:** The dimer diol of Westfechtel et al has at least 18 carbon atoms (Col 2 lines 27-30).

54. **Regarding claim 7:** The diol used to produce the polyester comprises ethylene glycol and/or propylene glycol (Col 3 lines 10-14).

55. **Regarding claims 9 and 11:** As discussed in paragraphs 44 and 45, Westfechtel et al render obvious the molecular weight of claims 9 and 11

56. **Regarding claim 12:** The prepolymer has an NCO content of 16.8 wt% (Col 6 lines 22).

57. **Regarding claims 13, 23, and 30:** Prepolymer B, Example 1 of Westfechtel et al has 33 wt% of diol and 67 wt% of polyisocyanate. Therefore in view of Tetsuo et al, which teach that the diol is a polyester having 70 wt% of dimer fatty acid, the resulting prepolymer would have 23 wt% of dimer fatty acid:

$$(.7)*(33) = .2324 = 23.24\%$$

58. **Regarding claim 20:** As discussed in paragraph 48, it would be obvious to apply the adhesive of Westfechtel et al to a substrate.

59. **Regarding claims 10, 14-19, 24, 26, and 29:** Although not explicitly disclosed in the prior art, one of ordinary skill would expect the adhesive rendered obvious by Westfechtel et al in view of Tetsuo et al to exhibit the claimed glass transition temperatures, mechanical properties, and viscosities since said adhesive is based on identical reactants that are present in overlapping amounts.

60. **Regarding claim 25:** Additional polyisocyanate may be present with the prepolymer (Col 5 lines 9-10).

61. **Regarding claim 31:** Column 3 lines 27-31 of Westfechtel et al states that the polyester polyol may be produced by reacting diol with dimer fatty acid **"and/or"** trimer fatty acid, i.e. the fatty acid may consist of 100% dimer fatty acid – which the secondary teachings of Tetsuo et al allows for (70 – 100 wt% of dimer fatty acid).

62. **Regarding claim 32:** The diol of Westfechtel et al is present relative to the carboxylic acid groups in an OH:COOH ratio ranging from 1.8:1 to 2:1 (Col 3 lines 16-22).

**Obviousness Rejection III**

63. **Claims 21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Westfechtel et al ('811) in view of Krebs (U.S. Patent 5,994,493).

64. **Regarding claims 21 and 22:** As previously discussed in paragraph 9, Westfechtel et al teach moisture-curable adhesive comprising isocyanate-terminate prepolymer that is the reaction product of polyisocyanate and hydroxyl-functional polyester wherein said polyester comprises dimers of fatty acid. However Westfechtel et al fail to teach wood substrates as a suitable bonding material.

65. Krebs also teaches moisture curable adhesives comprising isocyanate-terminate prepolymer that is the reaction product of polyisocyanate and hydroxyl-functional polyester wherein said polyester comprises dimers of fatty acid (Abstract; col 4 lines 23-39; col 5 lines 41-46). Moreover, Krebs teach that the adhesive is useful in bonding to wood, specifically wood fiber molds - which is taken to satisfy the "cladding" material of claim 22.

66. Therefore it would have been obvious to arrive at the limitations of claims 21 and 22 since Krebs teach wood as a suitable bonding material for adhesives comprising analogous moisture curable isocyanate-terminated prepolymers.

**Obviousness Rejection IV**

67. **Claims 21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al (JP 2003-013032) in view of Krebs ('493).

68. **Regarding claims 21 and 22:** As previously discussed in paragraph 25, Tetsuo et al teach moisture-curable adhesive comprising isocyanate-terminate prepolymer that is the reaction product of polyisocyanate and hydroxyl-functional polyester wherein said polyester comprises dimers of fatty acid. However, Tetsuo et al fail to teach wood as a suitable bonding material.

69. As discussed in paragraph 65 Krebs also teaches moisture curable adhesives comprising fatty acid dimer polyester, wherein said adhesive is useful in bonding to wood, specifically wood fiber molds - which is taken to satisfy the "cladding" material of claim 22.

70. Therefore it would have been obvious to arrive at the limitations of claims 21 and 22 since Krebs teach wood as a suitable bonding material for adhesives comprising analogous moisture curable isocyanate-terminated prepolymers.

**Obviousness Rejection V**

71. **Claims 21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Westfechtel et al ('811) in view of Tetsuo et al (JP 2003-013032) and Krebs ('493).

72. **Regarding claims 21 and 22:** As previously discussed in paragraph 50 and 51, Westfechtel et al in view of Tetsuo et al render obvious moisture-curable adhesive comprising isocyanate-terminate prepolymer that is the reaction product of polyisocyanate and hydroxyl-functional polyester wherein

said polyester comprises dimers of fatty acid. However, the prior art fail to teach wood as a suitable bonding material.

73. As discussed in paragraph 65 Krebs also teaches moisture curable adhesives comprising fatty acid dimer polyester, wherein said adhesive is useful in bonding to wood, specifically wood fiber molds - which is taken to satisfy the "cladding" material of claim 22.

74. Therefore it would have been obvious to arrive at the limitations of claims 21 and 22 since Krebs teach wood as a suitable bonding material for adhesives comprising analogous moisture curable isocyanate-terminated prepolymers.

***Response to Arguments***

75. Applicant's arguments with respect to claims 1-4, 7, 9-26, and 29-32 have been considered but are moot in view of the new ground(s) of rejection. Specifically, the newly presented rejections address the claimed limitations consisting of an moisture curable adhesive based on the reaction product of polyisocyanate and dimer diol/polyester based on dimer fatty acid - see paragraphs 9, 26, 37and 50-51.

***Conclusion***

76. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm.

77. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

78. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin J Gillespie/
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796